National Post-Acute Sequelae of COVID‑19 (PASC) Plan

Contents

[Acknowledgements 3](#_Toc157771505)

[Introduction 4](#_Toc157771506)

[Definition of PASC 5](#_Toc157771507)

[The patient experience of PASC 6](#_Toc157771508)

[Inquiry into Long COVID and Repeated COVID Infections 7](#_Toc157771509)

[Our Commitment 7](#_Toc157771510)

[Strategic priorities 8](#_Toc157771511)

[Principles 8](#_Toc157771512)

[Challenges 9](#_Toc157771513)

[Opportunities 10](#_Toc157771514)

[What is the Government doing already? 11](#_Toc157771515)

[Primary care 11](#_Toc157771516)

[Mental health 13](#_Toc157771517)

[Other healthcare support 13](#_Toc157771518)

[Research 13](#_Toc157771519)

[Data linkage 15](#_Toc157771520)

[What strategies are planned 15](#_Toc157771521)

[Our ongoing COVID-19 response 17](#_Toc157771522)

[Abbreviations 18](#_Toc157771523)

# Acknowledgements

In the spirit of reconciliation, the Commonwealth Department of Health and Aged Care (Department) acknowledges the Traditional Custodians of Country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

The National PASC Plan is informed by the findings and recommendations of the House Standing Committee on Health, Aged Care and Sport’s *Inquiry into Long COVID and Repeated COVID Infections.* The Committee tabled its report – ‘[Sick and tired: Casting a long shadow](https://parlinfo.aph.gov.au/parlInfo/download/committees/reportrep/RB000006/toc_pdf/SickandtiredCastingalongshadow.pdf)’ – on 19 April 2023. The report was informed by almost

600 submissions and testimonies from various stakeholders including individuals, community groups, leading health experts, prominent public health organisations and state and territory health departments.

# Introduction

Post-Acute Sequelae of COVID-19 (PASC) is an emerging health issue both in Australia and internationally. The Australian Government recognises that some Australians have experienced a prolonged illness with persistent symptoms or ‘clinical sequelae’ for weeks to several months after being infected with SARS-CoV-2 (the virus that causes COVID-19). Evidence surrounding PASC and best practice management is evolving, and it is understandable that this may cause confusion for both individuals and healthcare providers.

There is still uncertainty about the prevalence of PASC in Australia. In 2022, the Australian Institute of Health and Welfare (AIHW) estimated that 5% to 10% of

COVID‑19 cases may develop PASC[[1]](#footnote-2). However, these estimates are based on limited data capturing self-reported symptoms. More robust research is required to understand the true prevalence of PASC in Australia. This is particularly important given Australia’s experience of PASC may be different to that experienced internationally, due to factors that are unique to our context.

Most of Australia’s COVID infections were of the Omicron variant and occurred in a highly vaccinated population, with many individuals having received a primary COVID‑19 vaccination course (two doses) and some a booster dose, prior to initial infection. This contrasts with the experience of many other Organisation for Economic Co-operation and Development (OECD) nations, which experienced significant waves of Alpha and Delta variant infection in their populations prior to widespread vaccine and booster availability.

Both vaccination against COVD-19,[[2]](#footnote-3),[[3]](#footnote-4) and infection with the Omicron variant (compared to Delta),[[4]](#footnote-5) are independently associated with a lower risk of developing PASC. Research shows that COVID-19 vaccination is associated with reduced risk of PASC[[5]](#footnote-6), particularly when vaccination occurs prior to having COVID-19[[6]](#footnote-7). However, further studies are required to determine the effectiveness of vaccines in treating existing PASC[[7]](#footnote-8).

# Definition of PASC

Agreement to a nationally consistent PASC definition is a key enabler for the overarching aims of the National PASC Plan. As recommended by the Inquiry’s final report, the World Health Organization’s (WHO) definition of ‘[post COVID-19 condition](https://www.who.int/europe/news-room/fact-sheets/item/post-covid-19-condition)’ will be used to define PASC in Australia. As new research and evidence emerges, the definition may need to be reviewed.

Aligned with the WHO definition, the term ‘PASC’ has been used in this document to represent individuals who have new or ongoing symptoms twelve weeks after being infected with SARS-CoV-2, that are not explained by an alternative diagnosis.

The term PASC encompasses the range of presentations and symptoms that can be experienced after the acute phase of COVID-19, and recognises the potential long-term impact of COVID-19 on different systems in the body. Long COVID is a term used commonly in the community to describe both ongoing symptomatic COVID-19 (symptoms lasting more than four weeks) and PASC.

# The patient experience of PASC

The Government recognises PASC is a complex and multi-system illness, and the duration of symptoms varies. Every person with PASC will have a unique experience, with differing management and support needs. Additionally, factors such as socioeconomic position, conditions of employment, the distribution of wealth, education, housing, ethnicity and social support – known collectively as the social determinants of health – may also affect the patient experience of people who have PASC.

It is known that PASC patient presentation can vary greatly, with more than 200 symptoms recognised across the literature. Like other chronic conditions, PASC symptoms can be episodic and may fluctuate and/or relapse over time and this can make diagnosis and management more challenging.

Most people with PASC can be supported through primary care services. To best respond to the needs of people with PASC, it is important to ensure co-design of optimal care pathways with patients and healthcare providers. The strategic priorities outlined in this plan recognise this need and focus on improving primary care-based models of care; providing the health care sector and community with information; and supporting research to guide clinical care. The typical supports for people with PASC are as follows.



# Inquiry into Long COVID and Repeated COVID Infections

Following a referral on 1 September 2022 from the Minister for Health and Aged Care, the Hon. Mark Butler MP, the House Standing Committee on Health, Aged Care and Sport (Committee) held an Inquiry into Long COVID and Repeated COVID Infections (Inquiry). The final report was tabled on 19 April 2023, having been informed by almost 600 submissions and testimonies from various stakeholders including individuals, community groups, leading health experts, prominent public health organisations and state and territory health departments. For more information about the Inquiry, please see the [Parliament of Australia website](https://www.aph.gov.au/longandrepeatedcovid).

The Government recognises that another aspect of Australia’s COVID-19 recovery is our response to PASC. Several health reforms and initiatives are already underway that will support people with PASC, and the Government remains focused on research initiatives to build Australia’s understanding of PASC and guide longer term policy.

The National PASC Plan complements the Australian Government’s response to the Inquiry and provides a framework for how the health system will respond to PASC in Australia.

# Our Commitment

In responding to PASC, the Government is committed to ensuring that:

* All people with PASC, their families and carers, can readily access support, care, and treatment to achieve their best possible health and wellbeing outcomes; and
* A strong healthcare system that can deliver effective patient-centred care to people with PASC, when and where they need it.

The Government is also committed to continuing to support initiatives that reduce the incidence and severity of COVID-19 infection, and through this the number of people who develop PASC. See [Our ongoing COVID-19 response](#_Our_ongoing_COVID-19) for more information.

# Strategic priorities

The strategic priorities of the National PASC Plan include:

 Improving primary-care-based models of care available to people with PASC.

 Informing the health sector and the community about PASC.

 Supporting research to increase our knowledge of PASC and guide future policy and clinical care.

# Principles

The Government’s response to PASC in Australia will ensure that the delivery of health services, supports and research for PASC are:

 Patient-centred

 Empowering

 Equitable

 Efficient

 Sustainable

 Accessible

 Informed by lived experience

# Challenges

* Much like other chronic conditions, PASC is a complex, multi-system illness with the potential to substantially impact individuals, communities and society through increased health care costs, economic burden, and productivity loss.
* Increasing health system and workforce capacity to effectively manage the significant existing burden of chronic disease and its impact on individuals, their families and carers, alongside people with PASC.
* Addressing service delivery challenges in general practice that are increasing due to changes in patient factors, particularly increasing prevalence of complex and chronic conditions and multi-morbidity.
* Ensuring equitable access to services and supports across Australia that are available to people with PASC noting some groups (e.g., older people, First Nations peoples, people with disability, people from culturally and linguistically diverse backgrounds, people experiencing socio-economic disadvantage and people living in rural and remote areas) have reported difficulties accessing affordable and timely primary care and may require additional support.
* Ensuring equitable, sustainable, and efficient distribution of resources to support the health and wellbeing of all Australians. People with PASC experience similar issues to those with other chronic conditions (e.g., impacts on social interaction, emotional and psychological wellbeing, participation in education or employment).
* Developing a coordinated approach to PASC management that is responsive to need and to emerging best practice evidence, is consistent and empowering with accessible resources available to support both healthcare providers and the public.
* Engaging effectively across all levels of government. In Australia, each level of government – federal, jurisdictional, and local – has its own health responsibilities. States and territories may use different systems to collect data and meet community health needs. The discrepancy across these systems and limitations to interoperability presents difficulties when data sharing within jurisdictions and at a national level.
* Improving our understanding of PASC in Australia, as well as best practice management and response.
* Ensuring ongoing research to determine whether treatments given during the acute phase of COVID-19 can reduce the risk of PASC, given the limited evidence currently available to provide recommendations for the treatment of PASC.

# Opportunities

* Optimise primary care models with wrap around multidisciplinary support to deliver appropriate management to people with PASC and integrate care with the management of other chronic conditions (where present) to optimise health outcomes.
* Utilise existing health reforms and initiatives to address longstanding barriers, enhance our response to PASC and ensure efficient and equitable use of resources.
* Drive the development of nationally consistent clinical guidelines and care escalation pathways to ensure consistent and best-practice management of people with PASC, with a particular focus on primary care.
* Engage with people with a lived experience of PASC, and groups disproportionately affected by COVID-19, to ensure collaboration and co-design of the resources to support PASC recovery and self-management.
* Enhance awareness and understanding of PASC for healthcare providers and the community and empower individuals to effectively self-manage symptoms in their recovery.
* Harness useful and effective elements from the [National Strategic Framework for Chronic Conditions](https://www.health.gov.au/sites/default/files/documents/2019/09/national-strategic-framework-for-chronic-conditions.pdf) that can be utilised in PASC management. The National Strategic Framework for Chronic Conditions outlines the overarching policy for the prevention and management of chronic conditions in Australia and underpins 11 specific chronic disease action plans.
* Leverage the Australian Centre for Disease Control (CDC), once operational, to improve access to expertise and contemporary research, data and information systems, strengthened national health sector coordination, and health promotion avenues to support enduring, high-quality, and consistent models of care and patient resources into the future.
* Progress integration efforts within and between jurisdictions to enable a national system for PASC data collection and subsequent analysis. This can support a better understanding of the impacts of PASC stratified by age, gender, ethnicity, First Nations status and disability.
* Generate evidence to improve health care and outcomes, with translation of research findings into clinical guidance and policies through the Medical Research Futures Fund (MRFF) Post-Acute Sequalae of COVID-19 Research Plan.

# What is the Government doing already?

The Government has announced a number of initiatives and funding commitments to bolster research capacity, improve accessibility of healthcare services and support the management of people with chronic conditions, including people with PASC.

The National PASC Plan recognises the landscape of broader health reforms currently pursued by the Government, including (but not limited to) the:

* [Primary Care 10 Year Plan 2022-32](https://www.health.gov.au/resources/publications/australias-primary-health-care-10-year-plan-2022-2032)
* [Strengthening Medicare Taskforce Report](https://www.health.gov.au/resources/publications/strengthening-medicare-taskforce-report?language=en)
* National Preventative Health Strategy 2021-30
* [National Health Reform Agreement 2020-25](https://www.health.gov.au/our-work/2020-25-national-health-reform-agreement-nhra)
* [National Strategic Framework for Chronic Conditions](https://www.health.gov.au/resources/publications/national-strategic-framework-for-chronic-conditions?language=en)

## Stethoscope outlinePrimary care

Most people with PASC can be supported through primary care services, though some may require other, non-General Practitioner (GP), specialist or allied health referral. This is consistent with the final recommendations arising from the long COVID Inquiry.

Patients with PASC can currently access Medicare Benefits Schedule (MBS) items for the management of their condition, including time-tiered GP attendance items and specialist general consultation items. Patients may also be eligible for MBS chronic disease management items, which enable GPs to plan and coordinate patient care and refer patients to MBS subsidised allied health services.

Medicare is the foundation of Australia’s primary health care system, and the Government continues to support healthcare reforms to ensure Australians can have improved access to primary care services and better integrated multidisciplinary-based care, when and where they need it.

The Australian Government announced a historic $6.1 billion of investments in the 2023-24 Budget to lay the foundations for a stronger Medicare. This Budget delivers critical funding to meet the urgent healthcare needs of today, while starting reforms to build a stronger Medicare for future generations and responding to the recommendations of the Strengthening Medicare Taskforce. These reforms present an opportunity to support individuals with the management and treatment of complex and chronic conditions, including PASC.

Patients with PASC are now eligible for a larger Medicare rebate following the creation of a new MBS item for consultations longer than 60 minutes. These new MBS items will enable doctors to provide higher quality care to people with chronic or complex needs.

Additionally, people with PASC will be able to benefit from the Government’s $445.1 million commitment over 5 years to expand general practices and improve patient care by incentivising practices to employ a range of health professionals to provide team-based care. From 1 November 2024, people with PASC will also benefit from streamlined arrangements for chronic disease management plans, and equalisation of the benefits for planning and reviews of chronic disease management plans by GPs. This will encourage more regular patient management and treatment reviews resulting in better outcomes.

Some people with PASC will also benefit from the Government’s $3.5 billion investment to triple bulk billing incentives for the most common GP consultations items, to support GPs to continue bulk billing patients. Children under 16, pensioners, and other Commonwealth concession card holders are eligible for the increased incentives that commenced on 1 November 2023. People with PASC could benefit from increased access to multidisciplinary care through the Government’s commitment of $79.4 million over 4 years to support Primary Health Networks in commissioning multidisciplinary team health services for the management of people with chronic conditions and mental health conditions in underserviced communities.

Additionally, people with PASC will benefit from the introduction of MyMedicare services. MyMedicare will support the development of stronger relationships between patients and their primary care teams, for those who choose to opt-in. This will promote continuity of care, particularly for those requiring longer consultations or multidisciplinary care, and improve access to telehealth consultations for patients who have registered with their local GP. Registration for MyMedicare opened on 1 October 2023. From mid-2024, people with PASC who have registered for MyMedicare and visit the hospital frequently will benefit from connections to more appropriate care in general practice. From August 2024, MyMedicare patients who live in a residential aged care home will have access to more regular visits from their GP and better care planning.

In June 2023, the Government announced a new $50 million research initiative to drive innovation in primary care. Priority groups for research will include people with complex chronic conditions. Funding will be targeted to research focusing on identifying and evaluating models of primary care including team-based care, the application of research findings in primary care settings and spreading knowledge to improve person-centred care, and better use of data and digital technologies to evaluate models and support health system planning. Research projects will be funded from July 2024. The outcomes of this research will help inform and improve the primary-care based models of care available to people with PASC.

## Brain in head outlineMental health

People with PASC can access a number of mental health supports. These include Medicare-subsidised mental health services through the MBS Better Access Initiative, access to telehealth arrangements, a range of online and digital supports and access to mental health support through MBS chronic disease management items.

The national Head to Health program offers free information, programs and services to all Australians seeking support with their mental health and wellbeing. It is positioned to offer support to people with PASC through the mental health services on offer and is managed via the face-to-face, phone service and website channels. The Government is also working with state and territory governments to expand the Head to Health adult mental health network, with the establishment of 61 sites by 30 June 2026. Through these investments, people with PASC will continue to benefit from this program.

The Government’s ongoing commitment to mental health reform will include considering a new model for digital mental health services. This will ensure digital services, including clinician-supported online services, are appropriately embedded within the mental health service system.

## Hospital outlineOther healthcare support

The Government funds states and territories to provide public hospital services through the National Health Reform Agreement (NHRA). The NHRA aims to improve health outcomes for Australians by providing better coordinated, high-quality care in the community. States and territories decide the mix of the services and functions delivered in their jurisdiction, and some have used funding to establish clinics for the management of people with PASC.

To improve the monitoring and transparency of the usage and costs of PASC services, the Independent Health and Aged Care Pricing Authority (IHACPA) introduced two new classifications for the treatment of PASC in a non-admitted/outpatient setting from 1 July 2023. Whilst these services are already funded through the public health system, the introduction of these new classifications will ensure the delivery, costs and prices for PASC-related services delivered to patients are able to be accurately tracked by the IHACPA and updated as necessary.

## Microscope outlineResearch

In response to the final recommendations arising from the long COVID Inquiry, the Government committed $50 million of funding over four years from the MRFF for research into PASC. The objectives of this research are to generate evidence on the current and future impacts of PASC in the Australian context; design and evaluate clinical pathways and models of care for Australians with PASC while addressing inequities in access and outcomes; and generate new diagnostic and therapeutic approaches to prevent the occurrence of PASC and/or improve health outcomes for individuals with PASC. Much of this work will be co-led by general practitioners and primary care providers and conducted in collaboration with health services and policy makers, to facilitate research translation. The funding will be provided through the MRFF PASC Research Plan, which has been developed by an Expert Advisory Panel, to ensure investment focusses on the areas most likely to improve patient outcomes and health care experiences. The first of two grant opportunities disbursing this $50 million in funding opened on 6 September 2023.

The Government has also supported additional research into PASC through the MRFF and the National Health and Medical Research Council (NHMRC). Between 2020 and 2021, over $13 million was committed from the MRFF for research into the long-term effects of COVID-19. In 2020, two clinical trials were awarded grants: $2.4 million to the University of New South Wales to investigate statin treatment to prevent brain complications as a result of COVID-19 and maintain memory and thinking after infection and $2.6 million to the University of Melbourne to investigate the use of cardioprotective therapy to manage the persistent cardiovascular effects of COVID-19 and prevent progression to heart failure after recovery. These trials are estimated to be completed at the end of 2024.

In 2021, three additional research projects were awarded grants. Murdoch University was awarded $3.4 million to further its research to improve the understanding of

long-term impacts of COVID-19 and to develop new models to predict disease progression and tailor treatment. This group has published several articles on their research to increase the understanding of long COVID. The University of Melbourne was also awarded a $1.8 million grant to investigate the effect that SARS-CoV-2 variants of concern may have on the brain and to develop a diagnostic test to identify patients at risk of brain injury.

In 2021, through the NHMRC, $1.6 million was provided for research into PASC. Two projects were funded: $717,305 to the University of Queensland for research on COVID-19-induced vascular complications: mechanisms and potential therapies; and $904,308 to the University of Queensland for research on targeting neuropilin in

SARS-CoV-2 neuronal uptake and transport.

In October 2022, the Government reaffirmed its commitment to provide $5 million in grant funding to the Australian Partnership for Preparedness Research on Infectious Disease Emergencies Network (APPRISE) for the Strengthening Australia’s response to Infectious Diseases program. This will fund two nationally significant research collaborations exploring: the long-term effects of SARS-CoV-2 and its impact on health service utilisation, and the use and effectiveness of oral antivirals in the treatment of SARS-CoV-2. This project is intended to be completed by 2025 and improve national collaboration on infectious disease emergency response research.

The Government is committed to supporting the above research initiatives to build Australia’s understanding of PASC and guide longer term policy. As new research and evidence emerges, Australia’s response to PASC and models of care for the management of PASC will also continue to evolve.

## Cloud Computing outlineData linkage

There are a number of data linkage and data analysis projects underway that will help to better understand the prevalence and impact of PASC in Australia. In 2021, the AIHW was funded $3 million by the MRFF to establish a national linked data platform that integrates COVID-19 case information with a range of relevant existing health data sets. These data can be used to provide new insights into the health outcomes for people who have had COVID-19, with the de-identified dataset now available to approved researchers. These data can support a better understanding of the impacts of PASC stratified by clinical and demographic information including vaccination status, age, gender and priority populations, such as First Nations Australians and people with disability.

The Department also continues to work with states and territories to improve COVID-19 data integration, which will support more comprehensive case identification and further enable the study of long-term health effects associated with COVID-19. Work is underway for the Australian Centre for Disease Control to build on existing data and surveillance capability by enhancing state and territory collaboration. This is intended to drive nationally consistent data collection and improve data sharing and linkages once fully operational as part of the phased transition to a standalone Centre for Disease Control.

# What strategies are planned

The following strategies build on existing actions taken by the Government and have been developed in response to recommendations from the [Standing Committee on Health, Aged Care and Sport’s Inquiry into Long COVID and Repeated COVID Infections](https://www.aph.gov.au/longandrepeatedcovid#:~:text=Following%20a%20referral%20on%201,closed%20on%2018%20November%202022.).

These strategies aim to improve the health outcomes and lived experience for people with PASC and optimise health system delivery to be patient-centred, easy to navigate and supportive of patients through their recovery.

| **Our Vision** |
| --- |
| * Ensure all people with PASC, their families and carers, can readily access support, care, and treatment to achieve their best possible health and wellbeing outcomes
* A strong healthcare system that can deliver effective patient-centred care to people with PASC, when and where they need it
 |
| **Principles** |
| ****Patient-centred**** |  **Empowering** |  **Equitable** |  **Efficient** |  **Sustainable** |  **Accessible** |  **Informed by lived experience** |
| **Strategic priorities** | Strategies | Outcomes | Actions to date |
| Improving primary care-based models of care available to people with PASC | * Build workforce capacity by incentivising general practices to employ a range of healthcare providers.
* Review existing telehealth MBS items, and consider the need for additional or amended items, to increase the use of telehealth and digital health resources for primary care delivery, including for rural and remote areas.
* Increase the number of primary health services providing after hours care.
* Review MBS item rebates to increase the number of bulk-billed primary care services.
* Continue to assess current arrangements in primary care funding, workforce distribution, and policy commitments required to support management of people with PASC; including how these align with existing reforms.
 | * Increased number of people with PASC being managed through a primary health led model of care, with wrap around multidisciplinary support available as part of a holistic patient-centred approach to management.
* Improved access to primary care services and supports for people with PASC, particularly for priority populations.[[8]](#footnote-9)
* Ongoing reform of the Australian health system, with a focus on primary care, to improve care of complex and chronic conditions, including PASC.
 | * $6.1 billion investment in reforms to build a stronger Medicare as detailed in the 2023-24 Budget.
* This includes a commitment of $445.1 million over five years to expand general practices and improve patient care by incentivising practices to employ a range of health professionals to provide team-based care.
* It also includes $79.4 million over four years for Primary Health Networks to commission multidisciplinary services that support small general practices that cannot engage a multidisciplinary workforce through other funding streams.
* $50 million research initiative through the MRFF to drive innovation in primary care (MRFF Primary Health Research Plan).
 |
| Informing the health sector and community about PASC | * Develop clinical resources for PASC and encourage review as new evidence emerges.
* Encourage collaboration with healthcare providers to develop and distribute additional primary care based PASC resources.
* Support engagement with people with a lived experience of PASC to
* co-design and distribute resources to the Australian public, including materials that support self-management.
 | * Availability and revision of PASC clinical guidelines for healthcare providers to ensure best practice management, including clear care escalation pathways for those who require other (non-GP) specialist input.
* Improved healthcare provider awareness and understanding of PASC.
* Improved community knowledge and awareness of PASC, including educational resources for patients and their families.
 | * Contracting the Royal Australian College of General Practitioners to develop clinical care guidelines and a patient resource for managing post COVID-19 symptoms.
* Dissemination of long COVID communication materials through the Department’s website, social media and other communication channels.
* Publication of the *Getting help for long COVID* factsheet.
 |
| Supporting research to increase our knowledge of PASC and guide future policy and clinical care | * Develop systems with interoperable functionality to support data collection.
* Promote consistent data collection, including demographic data relating to priority populations, and improve integration within and between states and territories.
* Identify priority PASC research areas for funding and encourage participatory research.
* Increase the coordination and volume of PASC-related research activities led by Australian-based researchers.
* Regularly review research outcomes to evaluate the suitability of current guidelines and policies, with updates as required.
 | * Greater utility of data at the national level for research, surveillance and monitoring.
* Improved understanding of the current and future impacts of PASC in Australia, including amongst priority populations.8
* New therapeutic approaches to prevent the occurrence of PASC and/or improve health outcomes for individuals with PASC.
* Translation of research outcomes and lived experiences into clinical guidance and policy to address the needs of all people with PASC, including priority populations.
 | * Investments in PASC research include:
* $50 million from the MRFF for PASC research over four years from 2023-24 (MRFF PASC Research Plan)
* $13 million from the MRFF for research into the
* long-term effects of COVID-19 between 2020 and 2021
* $1.6 million from the NHMRC in 2021
* $5 million to the Australian Partnership for Preparedness Research on Infectious Disease Emergencies Network in 2022.
 |

# Our ongoing COVID-19 response

The Government will continue to support initiatives that reduce the incidence and severity of COVID-19 infection, and through this the number of people who develop PASC. These include initiatives to improve:

* Vaccination and booster rates, particularly amongst priority populations.
* Community understanding of protective behaviours and public health measures that limit the spread of COVID-19 through communication campaigns and targeted resources.
* Efforts across all levels of Government to review and reform ventilation and air quality standards.

Secondary prevention includes interventions for people with COVID-19 to prevent the development of PASC. Building PASC research capacity will support ongoing efforts to identify effective secondary prevention measures. This may include research into the effectiveness of using antivirals to prevent the development of PASC. The Department will continue to review evidence on secondary prevention as it becomes available.

For more information about the Government’s ongoing COVID-19 response, please see:

* ATAGI clinical guidance for COVID-19 vaccine providers <https://www.health.gov.au/our-work/covid-19-vaccines/advice-for-providers/clinical-guidance>
* Australian Health Sector Emergency Response Plan for Novel Coronavirus (COVID-19) <https://www.health.gov.au/resources/publications/australian-health-sector-emergency-response-plan-for-novel-coronavirus-covid-19?language=en>
* National COVID-19 Health Management Plan for 2023 <https://www.health.gov.au/resources/publications/national-covid-19-health-management-plan-for-2023?language=en>
* Oral COVID-19 treatments <https://www.health.gov.au/health-alerts/covid-19/treatments/eligibility>
* Australian Commission on Safety and Quality in Healthcare <https://www.safetyandquality.gov.au/>
* Improving ventilation in indoor workplaces: COVID-19 <https://covid19.swa.gov.au/doc/improving-ventilation-indoor-workplaces-covid-19>
* Local state and territory health departments <https://www.health.gov.au/about-us/contact-us/local-state-and-territory-health-departments>

# Abbreviations

| Abbreviations | Descriptions |
| --- | --- |
| **AIHW** | Australian Institute of Health and Welfare |
| **APPRISE** | Australian Partnership for Preparedness Research on Infectious Disease Emergencies |
| **ATAGI** | Australian Technical Advisory Group on Immunisation |
| **CDC** | Centre for Disease Control |
| **COVID-19** | Coronavirus Disease |
| **GP** | General Practitioner  |
| **IHACPA** | Independent Health and Aged Care Pricing Authority |
| **MBS** | Medicare Benefits Schedule |
| **MRFF** | Medical Research Future Fund |
| **NHMRC** | National Health and Medical Research Council |
| **NHRA** | National Health Reform Agreement |
| **OECD** | Organisation for Economic Co-operation and Development |
| **PASC** | Post-Acute Sequelae of COVID-19 |
| **WHO** | World Health Organization |

All information in this publication is correct as of February 2024

1. [Long COVID in Australia – a review of the literature](https://www.aihw.gov.au/reports/covid-19/long-covid-in-australia-a-review-of-the-literature/summary) [↑](#footnote-ref-2)
2. [Risk factors and disease profile of post-vaccination SARS-CoV-2 infection in UK users of the COVID Symptom Study app: a prospective, community-based, nested, case-control study](https://www.thelancet.com/article/S1473-3099%2821%2900460-6/fulltext) [↑](#footnote-ref-3)
3. [Impact of COVID-19 vaccination on the risk of developing long-COVID and on existing long-COVID symptoms: A systematic review](https://healthgov.sharepoint.com/sites/teamsandprojects/PHFP/Shared%20Documents/Long%20COVID%20-%20MSAU%20%26%20Public%20Health/Inquiry%20Public%20Hearing%20-%2017%20February/Working%20drafts/Impact%20of%20COVID-19%20vaccination%20on%20the%20risk%20of%20developing%20long-COVID%20and%20on%20existing%20long-COVID%20symptoms%3A%20A%20systematic%20review) [↑](#footnote-ref-4)
4. [Risk of long COVID associated with delta versus omicron variants of SARS-CoV-2 | Lancet](https://www.sciencedirect.com/science/article/pii/S0140673622009412?via%3Dihub) [↑](#footnote-ref-5)
5. #  [Risk factors for long coronavirus disease 2019 (long COVID) among healthcare personnel, Brazil, 2020–2022](https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/abs/risk-factors-for-long-coronavirus-disease-2019-long-covid-among-healthcare-personnel-brazil-20202022/AA01F17E1C8A33C07457914E63AB3EEE)

 [↑](#footnote-ref-6)
6. [Protective effect of COVID-19 vaccination against long COVID syndrome: A systematic review and meta-analysis](https://www.sciencedirect.com/science/article/pii/S0264410X23001342#s0065) [↑](#footnote-ref-7)
7. [Effect of covid-19 vaccination on long covid: systematic review](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9978692/) [↑](#footnote-ref-8)
8. Includes First Nations peoples, older people, people with disability, people from a culturally or linguistically diverse background, people experiencing socio-economic disadvantage, people living in rural and remote areas and people with mental illness. [↑](#footnote-ref-9)